

# TestAmerico

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Phoenix 4625 East Cotton Ctr Blvd Suite 189 Phoenix, AZ 85040 Tel: (602)437-3340

TestAmerica Job ID: 550-104057-1

Client Project/Site: First Mesa Consolidated Villages (50431)

For:

Mohave Environmental Laboratory 2580 Landon Dr Suite A Bullhead City, Arizona 86429

Attn: Sheila Poff

Authorized for release by: 6/27/2018 9:15:31 AM

Mary Hamilton, Project Manager I (602)437-3340

mary.hamilton@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# **Definitions/Glossary**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Job ID: 550-104057-1

#### Glossary

RER

RL RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
x	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	:
DLC.	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	ì
QC	Quality Control	

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#### **Case Narrative**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Job ID: 550-104057-1

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative 550-104057-1

Comments

No additional comments.

Receipt

The sample was received on 6/7/2018 9:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

TestAmerica Phoenix 6/27/2018

# Sample Summary

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 550-104057-1
 EP002-East Well #8/090400106 (50431-01)
 Drinking Water
 06/05/18 08:12
 06/07/18 09:15

N. 104-2247

# **Detection Summary**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Client Sample ID: EP002-East Well #8/090400106 (50431-01)

Lab Sample ID: 550-104057-1

1	Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1	Arsenic	0.036		0.0010	mg/L	1		200.8	Total/NA









This Detection Summary does not include radiochemical test results.

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# **Client Sample Results**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Client Sample ID: EP002-East Well #8/090400106 (50431-01)

Date Collected: 05/05/18 08:12 Date Received: 06/07/18 09:15

Lab Sample ID: 550-104057-1

Matrix: Drinking Water

Method: 200.8 - Metals (ICP/MS)

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 06/21/18 05:33 06/22/18 19:17 Arsenic 0.036 0.0010 mg/L



# **QC Sample Results**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Client Sample ID: Method Blank

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 550-150026/1-A

Matrix: Water

Analysis Batch: 150226

MB MB

Analyte Result Qualifier Arsenic <0.0010

RL Unit 0.0010 mg/L

Prepared 06/21/18 05:33 06/22/18 18:56

Analyzed

Lab Sample ID: LCS 550-150026/3-A

Matrix: Water

Analyte

Arsenic

Analysis Batch: 150226

Spike Added 0.100

LCS LCS Result Qualifier 0.101

Unit D %Rec mg/L 101 %Rec. Limits

Prep Batch: 150026

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 150026

85-115

Client Sample ID: Lab Control Sample

Lab Sample ID: LCSD 550-150026/4-A

Matrix: Water

Analysis Batch: 150226

Analyte Arsenic

Spike LCSD LCSD Added Result Qualifier 0.100 0.101

Unit mg/L

Unit

Unit

mg/L

%Rec. D %Rec Limits 101 85 - 115

Client Sample ID: Lab Control Sample Dup

Prep Batch: 150026 RPD RPD Limit 0 20

Lab Sample ID: 550-104056-A-1-C MS

Matrix: Water

Analysis Batch: 150226

Sample Sample Analyte Result Qualifier Arsenic 0.017

Spike Added 0.100

MS MS Result Qualifier 0.119

%Rec 102

Prep Batch: 150026 %Rec. Limits 70 - 130

70 - 130

Client Sample ID: Matrix Spike

Lab Sample ID: 550-104056-A-1-D MSD

Matrix: Water

Analysis Batch: 150226

Sample Sample Analyte Result Qualifier Arsenic 0.017

Spike MSD MSD Added Result Qualifier 0.100 0.120

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

D %Rec

102

Prep Batch: 150026 %Rec. RPD Limits RPD Limit

0

20

# **QC Association Summary**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

#### Metals

#### Prep Batch: 150026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-104057-1	EP002-East Well #8/090400106 (50431-01)	Total/NA	Drinking Water	200.8	
MB 550-150026/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-150026/3-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-150026/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-104056-A-1-C MS	Matrix Spike	Total/NA	Water	200.8	
550-104056-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

#### Analysis Batch: 150226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-104057-1	EP002-East Well #8/090400106 (50431-01)	Total/NA	Drinking Water	200.8	150026
MB 550-150026/1-A	Method Blank	Total/NA	Water	200.8	150026
LCS 550-150026/3-A	Lab Control Sample	Total/NA	Water	200.8	150026
LCSD 550-150026/4-A	Lab Control Sample Dup	Total/NA	Water	200.8	150026
550-104056-A-1-C MS	Matrix Spike	Total/NA	Water	200.8	150026
550-104056-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	150026

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#### Lab Chronicle

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Lab Sample ID: 550-104057-1

Matrix: Drinking Water

Client Sample ID: EP002-East Well #8/090400106 (50431-01)

Date Collected: 06/05/18 08:12 Date Received: 06/07/18 09:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			150026	06/21/18 05:33	SGO	TAL PHX
Total/NA	Analysis	200.8		1	150226	06/22/18 19:17	TEK	TAL PHX

#### Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

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# **Accreditation/Certification Summary**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

#### Laboratory: TestAmerica Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region		Expiration Date
Arizona	State Prog	ram	9	AZ0728	06-09-19
Analysis Method	Prep Method	Matrix	Anal	yte	
Nevada	State Progr	ram	9	AZ01030	07-31-18*
Analysis Method	Prep Method	Matrix	Anal	yte	

<sup>\*</sup> Accreditation/Certification renewal pending - accreditation/certification considered valid.

# **Method Summary**

Client: Mohave Environmental Laboratory

Project/Site: First Mesa Consolidated Villages (50431)

TestAmerica Job ID: 550-104057-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL PHX
200.8	Preparation, Total Metals	EPA	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

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#### Login Sample Receipt Checklist

Client: Mohave Environmental Laboratory

Job Number: 550-104057-1

List Source: TestAmerica Phoenix

Login Number: 104057

List Number: 1

Creator: Maycock, Lisa

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.